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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,080	02/21/2002	Dong Hee Lee	SEM-0003	2344
7590	10/17/2005		EXAMINER DESIR, PIERRE LOUIS	
Daniel F. Drexler 55 Griffin South Road Bloomfield, CT 06002			ART UNIT 2681	PAPER NUMBER
DATE MAILED: 10/17/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,080

Applicant(s)

LEE, DONG HEE

Examiner

Pierre-Louis Desir

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Henry et al. (Henry), U.S. Patent No. 6663439.

Regarding claim 1, Henry discloses a battery connector for a mobile phone (i.e., electrical connector) (see abstract), installed in a main body of the mobile phone (see col. 1, lines 18-21) and contacting a battery terminal to supply power to a printed circuit board of the mobile phone (see col. 3, lines 7-9), the battery connector comprising: a body having a plurality of plunger housings (see fig. 1); a plunger slidably installed in each of the plurality of plunger housings of the body (see fig. 1, col. 2, line 65 through col. 3, line 2); a base cover member having a cylindrical connection part fitted in a lower end of each of the plurality of plunger housings (i.e., plunger contacts contain a rounded portion plunger portion wherein rectangular contact plates corresponding to the plunger contacts are disposed) (see fig. 1, , col. 2, line 65 through col. 3, line 3), a bottom surface of the base cover adhered to the PCB by soldering (see col. 4, lines 11-

12) and made of conductive material (i.e., conductive contacts) (see col. 3, lines 4-5); and coil spring (item 58) biasing the plunger in the plunger housing against the bottom of the base cover member (see fig. 2, col. 3, lines 20-26, col. 4, lines 17-35).

Regarding claim 2, Henry discloses an electric connector for providing electric connection between an electric power source and an operating member (see abstract, and col. 3, lines 7-9), comprising: a contact plunger for making contact with the electric power source (see fig. 1, and abstract), the contact plunger being made of conductive material (see col. 3, lines 28-30); a housing for slidably receiving the contact plunger (i.e., aperture) (see fig. 1, col. 2, line 65 through col. 3, line 2); a coil spring (item 58) disposed under the contact plunger inside the housing, for providing the contact plunger with elasticity and being made of conductive material (see fig. 2, col. 3, lines 20-26, col. 4, lines 17-35); and a base member disposed between the housing (see fig. 1, , col. 2, line 65 through col. 3, line 3) and the operating member for fixing the housing at a selected region on the operating member (see col. 4, lines 11-12), the base member being made of conductive material (i.e., conductive contacts) (see col. 3, lines 4-5).

Regarding claim 3, Henry discloses an electric connector (see claim 2 rejection) wherein the contact plunger comprises a contact portion (i.e., rounded plunger portion 30) for making direct contact with the electric power source, the contact portion protruding from an upper opening of the housing (see fig. 1, col. 2, line 65 through col. 3, line 2); a guide portion slidably disposed inside the housing (see fig. 2, col. 3, lines 12-26), the guide portion having contact with inner surface of the housing (see fig. 2); and a spring fixing portion extending downward from a lower end of the guide portion (see fig. 2), the spring fixing portion extending downward from a

lower end of the guide portion (see fig. 2), the spring fixing portion being disposed to be engaged with the coil spring (see fig. 2, col. 3, lines 35-42).

Regarding claim 4, Henry discloses an electric connector (see claim 3 rejection) wherein the housing comprises a shoulder formed at the upper opening of the housing (i.e., contact retention chamber 42) (see fig. 2, col. 3, lines 12-14), the shoulder extending inward from edge of the upper opening of the housing (see fig. 2); and a coupling groove formed on an outer surface at a lower end of the housing, the coupling groove being disposed to be engaged with the base member (i.e., the barbs 82 on the beams 78 (FIGS. 4 and 5) engage the partitions 50 to retain the caps 54 in place, which in turn holds the springs 58, and the plunger contacts 26 in the contact compartments 46).

Regarding claim 5, Henry discloses an electric connector (see claim 4 rejection), wherein the shoulder makes direct contact with an upper edge of the guide portion of the contact plunger in response to elastic movement of the spring (see fig. 2, col. 3, lines 12-26).

Regarding claim 6, Henry discloses an electric connector (see claim 4 rejection) wherein the base member comprises a connection part formed at an upper end of the base member (i.e., the cap includes the contact plate with beams extending upward from opposite, and having a base end configured to engage a mating contact and an open end) (see fig. 4, col. 3, lines 43-46, and col. 5, lines 26-29), the connection part having a cylindrical shape to be fitted with the coupling groove of the housing (see col. 3, lines 52-56).

Regarding claim 7, Henry discloses an electric connector (see claim 6 rejection) wherein the base member is soldered at the selected region on the operating member (see col. 4, lines 8-13).

Regarding claim 8, Henry discloses an electric connector (see claim 2 rejection) wherein the electric power source is a battery having a terminal to be in contact with the contact plunger (see col. 2, line 65 through col. 3, line 2).

Regarding claim 9, Henry discloses an electric connector (see claim 8 rejection) wherein the operating member is a circuit board for receiving electric power from the battery (see col. 2, lines 61-65).

Regarding claim 10, Henry discloses an electric connector (see claim 8 rejection) wherein the electric connector, the circuit board, and the battery are included in a mobile phone (see abstract, col. 1, lines 18-21, and col. 2, lines 61 through col. 3, line 2).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kobayashi, "Connector Assembly For Electronic Devices," U.S. Patent No. 5066235.

Lok, "Battery Connector," U.S. Patent No. 6068519.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Louis Desir
AU 2681
10/11/2005



ERIKA A. GARY
PRIMARY EXAMINER